



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/797,867 | 03/10/2004 | Po-Cheng Chen | 250122-1350 | 2229 |
| 24504 | 7590 | 12/19/2005 | EXAMINER | |
| THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948 | | | LEWIS, MONICA | |
| | | ART UNIT | PAPER NUMBER | |
| | | | 2822 | |

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/797,867 | CHEN ET AL. | |
| | Examiner Monica Lewis | Art Unit 2822 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 30days MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 March 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) _____ is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) 1-22 are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This restriction is in response to the application filed March 10, 2004.

Election/Restrictions

2. This application contains claims directed to the following patentably distinct species of the claimed invention:

Embodiment I (Claims 1, 2 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a plurality of parallel line segments, installed on a front substrate and a second pattern installed on the position corresponding to the first pattern of a rear substrate;

Embodiment II (Claims 1, 3 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a V-shaped line segment and a second pattern installed on the position corresponding to the first pattern of a rear substrate;

Embodiment III (Claims 1, 4 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a hexagonal star-column pattern and a second pattern installed on the position corresponding to the first pattern of a rear substrate;

Embodiment IV (Claims 1, 5 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a T-shaped line segment comprising a first and second horn column, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns are parallel to each other;

Embodiment V (Claims 1, 6 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a first and second T-shaped line segment comprising a first and second horn column and a first and second rectangle, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns are parallel to each other with a predetermined distance therebetween;

Embodiment VI (Claims 1, 7 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a T-shaped line segment comprising a first and second horn column, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns are parallel overlap each other;

Embodiment VII (Claims 1, 8 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a first and second T-shaped line segment comprising a first and second horn column and a first and second rectangle, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns overlap;

Embodiment VIII (Claims 1, 9 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a pentagon comprising two right angles and three non-right angles, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns overlap;

Embodiment IX (Claims 1, 10 and 11), directed to an alignment mark comprising a first pattern wherein the first pattern comprises a first and second pentagon comprising two right angles and three non-right angles, a second pattern installed on the position corresponding to the first pattern of a rear substrate and these two patterns overlap;

Embodiment X (Claims 12, 13 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a plurality of parallel line segments;

Embodiment XI (Claims 12, 14 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a V-shaped line segment;

Embodiment XII (Claims 12, 15 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a hexagonal star-column pattern;

Embodiment XIII (Claims 12, 16 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a T-shaped pattern comprising a horn column and a rectangle and these two patterns are parallel to each other;

Embodiment XIV (Claims 12, 17 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a first and second T-shaped pattern comprising a first and second horn column and a first and second rectangle and these two patterns are parallel to each other with a predetermined distance therebetween;

Embodiment XV (Claims 12, 18 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a T-shaped pattern comprising a horn column and a rectangle and these two patterns overlap;

Embodiment XVI (Claims 12, 19 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a first and second T-shaped pattern comprising a first and second horn column and a first and second rectangle and these two patterns overlap;

Embodiment XVII (Claims 12, 20 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a pentagon comprising two right angles and three non-right angles and these two patterns are parallel; and

Embodiment XVIII (Claims 12, 21 and 22), directed to a front substrate, a rear substrate wherein at least one set of alignment marks is installed on the front and rear substrates, the set of alignment marks comprise a first and second pattern wherein the first pattern comprises a first and second pentagon comprising two right angles and three non-right angles and these two patterns are parallel.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, none are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Art Unit: 2822

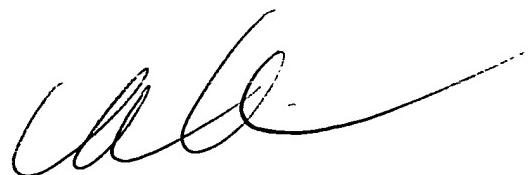
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee under 37 CFR 1.17(i).

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monica Lewis whose telephone number is 571-272-1838. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zandra Smith can be reached on 571-272-2429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 for regular and after final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

ML

December 12, 2005

A handwritten signature in black ink, appearing to read "ML", is positioned in the lower right area of the page.